
pgeigen Documentation

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Contents

1	Introduction	3
1.1	Installation	3
1.2	Documentation	4
1.3	License	4
2	Indices and tables	5

Contents:

Introduction

pgeigen is a PostgreSQL extension that uses the Eigen C++ template library to introduce new data types and functions suitable for linear algebra.

1.1 Installation

1.1.1 Software requirements

pgeigen requires PostgreSQL 9.1+ including development header files (normally postgresql-server-dev package or similar) as well as the Eigen header files in version 3+. The `$EIGEN` environment variable has to be set to the path that contains the Eigen header files, e.g. `/usr/local/include/Eigen`.

1.1.2 Obtaining the source code

The source code for **pgeigen** can be obtained by either downloading a source package from the [Bitbucket](https://bitbucket.org/aschreyer/pgeigen) repository or by cloning it with:

```
$ hg clone https://bitbucket.org/aschreyer/pgeigen
```

1.1.3 Installing the extension

The extension can be built and installed with:

```
$ make
$ sudo make install
```

This will build and install the shared library in the PostgreSQL server library directory. The extension can then be installed in the server by executing the following commands in PostgreSQL (e.g. `psql` or GUI tool):

```
$ CREATE EXTENSION eigen;
```

1.2 Documentation

This documentation is available from <http://pgeigen.readthedocs.org> (in progress).

1.3 License

pgeigen is released under the [MIT License](#).

Indices and tables

- *genindex*
- *modindex*
- *search*